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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,573	10/07/2003	Philip D. Childers	ATS835.0002	5245
34487	7590	12/21/2005	EXAMINER	
BRENT A. CAPEHART LaRiviere, Grubman & Payne, LLP 19 Upper Ragsdale Drive, Suite 200 P.O Box 3140 Monterey, CA 93940			CASAREGOLA, LOUIS J	
			ART UNIT	PAPER NUMBER
			3746	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/680,573

Applicant(s)

CHILDERS, PHILIP D.

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11/18/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,12 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 is/are rejected.
- 7) ☒ Claim(s) 8,12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Election***

Applicant's election of Group I, claims 1-8, and the species of Figure 2 is acknowledged. The election of Group I was made with traverse, but since non-elected claims 9-11 have been canceled, the traverse is moot. Applicant also suggests that amendments to claim 1 make species election unnecessary. These amendments however are not seen to invalidate the species election requirement, and that requirement remains in effect. Applicant has listed claims 1, 2, 6, 8 and 12 as readable on the elected species. An action on the merits of these claims is set forth below, and remaining non-elected claims 3-5 are withdrawn from further consideration.

### ***Claim Rejections - 35 USC 102***

Claims 1 and 6 are rejected under 35 USC 102(b) as being anticipated by Yamaguchi.

The claimed vaporization chamber assembly reads on conventional vaporization systems of the type disclosed by Yamaguchi. Attention is called to Yamaguchi's Figure 1; note aqueous mixture vaporization chamber 17, steam supply line 18 (chamber heat source), and nozzle array 10a (distribution grid). Note also that array 10a is arranged to supply a vaporized ammonia mixture to flue gas stream 4.

With regard to claim 6, it is additionally emphasized that recitation of an ammonia concentration of 29% is merely an intended mode of operation and not a structural feature of the claimed apparatus. If the apparatus claimed by applicant is presumed capable of operating with this ammonia concentration, then the corresponding prior art apparatus can be presumed equally capable.

***Claim Rejections - 35 USC 103***

Claim 2 is rejected under 35 USC 103(a) as being unpatentable over Yamaguchi in view of either Wilson or Fowler et al.

Claim 2 describes the recited heat source as a "band heater". Heaters of this type are a well known means for heating fluid in chambers as shown, for example, by Wilson (see element 2) and Fowler (see element 20). Yamaguchi currently employs a steam heater for vaporization chamber 17, but Yamaguchi's apparatus also happens to be used in combination with a steam boiler that provides a convenient source of steam heat. Yamaguchi's basic flue gas treatment system, however, has general utility, and when used to treat flue gas in apparatus without a boiler, there would be no convenient source of steam. In such instances, it would have been obvious to use another well known vessel heating device, such as the Wilson or Fowler band heater, to heat vaporization chamber 17.

***Allowable Subject Matter***

Claims 8 and 12 contain allowable subject matter but are objected to as depending from a rejected parent claim. If rewritten in independent form, these claims will be allowed.

***Final Rejection***

Applicant's amendment necessitated the new grounds of rejection. Accordingly, ***THIS ACTION IS MADE FINAL.*** See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

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L. J. Casaregola  
571-272-4826 (M-F; 7:30-4:00)  
571-273-8300 FAX  
June 26, 2001

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Timothy Thorpe, can be reached at 571-272-4444.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).